

## Abstract

A technology effective for improving the luminous efficiency, lifetime, and color temperature of a PDP having phosphor layers of three colors is disclosed. A PDP comprises a plurality of narrow tubes (60) arrayed on a substrate (51). In each narrow tube (60), one of phosphor layers (61R, 61B, 61G) is formed and a discharge gas is contained. The compositions and pressures of the discharge gases are set within appropriate ranges respectively corresponding to the phosphor layers (61R, 61B, 61G). Consequently, the PDP can have a lengthened life-time and an improved luminous efficiency. Reductions of variation in breakdown voltage and adjustment of color temperature are also possible with this constitution.